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375

AUTHOR: Myuller, R. M. S/054/60/000/01/022/027  
B004/B117

TITLE: The Third All-Union Conference on the Vitreous State

PERIODICAL: Vestnik Leningradskogo universiteta. Seriya fiziki i khimii, 1960, Nr 1, pp 144-145 (USSR)

ABSTRACT: The third All-Union Conference on the Vitreous State was organized in Leningrad from November 16 to 20, 1959, by the Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry AS USSR), the Vsesoyuznoye khimicheskoye obshchestvo im. D. I. Mendeleyeva (All-Union Chemical Society imeni D. I. Mendeleyev) and the Gosudarstvennyy opticheskiy institut im. S. I. Vavilova (State Institute of Optics imeni S. I. Vavilov). In the resolution adopted by the Conference, 17 scientific institutions are mentioned which contributed most effectively to the study of the problem of the vitreous state during the last six years. Among them, the State Institute of Optics, the Institute of Silicate Chemistry of the AS USSR, the Fizicheskiy institut AN SSSR (Physics Institute of AS USSR), the Fiziko-tekhnicheskiy institut AN SSSR (Institute of Physics and Technology of the AS USSR), the Institut fiziki AN BSSR (Institute of Physics of the AS BSSR), the Institut khimii AN BSSR (Institute of Chemistry of the AS BSSR), the Institut vysoko-

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polimerov AN SSSR (Institute of High Polymers of the AS USSR), the Gosudarstvennyy institut stekla (State Institute of Glass), the Leningradskiy gosudarstvennyy universitet (Leningrad State University), the Leningradskiy tekhnologicheskii institut im. Lensovet (Leningrad Institute of Technology imeni Lensovet). 101 lectures were held. More than 300 representatives of scientific institutions and about 100 representatives of industry were present. The following lectures are mentioned: A. A. Lebedev (State Institute of Optics) on the most recent data obtained in optical research; Ye. A. Poray-Koshits (Institute of Silicate Chemistry) on new X-ray study of submicroscopic inhomogeneous structure; N. V. Belov (AS USSR) on the importance of investigating complex crystal lattices with a high number of atoms in the elementary cell for the problem of the vitreous state; M. A. Bezborodov (AS Belorussian SSR) on new complex glasses; K. S. Yevstrop'yev (State Institute of Optics) on relations between the structure and the properties of glass; F. Vogel (Eastern Germany, Firm of Schott, Jena) on the electron microscopic investigation of glass; H. L. Myuller (Leningrad State University) on chemical particularities of vitrifying polymeric substances; N. A. Goryunova and B. T. Kolomiyets (Institute of

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The Third All-Union Conference on the Vitreous  
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Physical Technology AS USSR) on the vitrification of semiconductor materials synthesized from chalcogenides of As, Sb, and Th; V. V. Tarasov (Khimiko-tekhnologicheskii institut im. Mendeleyeva (Institute of Chemical Technology imeni Mendeleyev)) on investigations of the specific heat of vitreous systems; A. G. Vlasov (State Institute of Optics) gave a theoretical analysis of vibrations of the glass lattice. The subsequent seven meetings dealt with experimental, theoretical, and technological problems.

Card 3/3

MYULLER, V.

Determining the reduction indices of distillation efficiency.  
Izv.AN SSSR. Otd.tekh.nauk. Met.i topl. no.4:171-175 JI-Ag  
'62. (MIRA 14:3)  
(Distillation, Fractional)

GORBATSEVICH, S.V.; MYULLER, Y.V.; LUK'YANOV, P.N.

Current balance and determination of the value of the volt standard.  
Trudy VNIIM no.31:5-18 '57. (MIRA 11:11)  
(Electric standards)

. MYULLER, V.V.

Natural aging of standard elements. Trudy inst. Kom stand., mer 1 izm.  
prib. no.39:65-78 '60. (MIRA 14:3)  
(Electric standards)

MYULLER, V.V.

Methodology for measuring the e.m.f. of standard cells using  
electric current scales. Trudy inst. Kom. stand., ser i izm.  
prib. no. 52:15-26 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii  
im. D.I. Mendeleyeva.

(Electric batteries--Standards)  
(Electric measurements)

AMATUNI, N.L.; GORODENSKIY, G.V.; NIKOLAI, I.I.; RYKOVA, I.I.

Absolute determination of the c.m.f. value of the elements on electrical circuits using the absolute method. Izv. Akad. Nauk SSSR, 1964, no. 4: 1-3. (MIRA 18:3)

BLADINIA, Y. F., 1941-1942  
A.S.; CHALTRA, G. A.

New serial number assigned by the FBI is 44-6709-108.  
no. 44-6709-108.

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001135910001-0

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001135910001-0"

Country : USSR  
 Category : Farm Animals.  
 Poultry.  
 Abs. Jour : Ref Zhur-Biol., No 21, 1953, 96916  
 Author : Myuller, Zdenek  
 Institut. :  
 Title : The Effect of Procaine Penicillin upon the  
 Productivity of Hens.  
 Orig Pub. : Mezhdunar. s.-kh. zh., 1957, No 2, 131-140  
 Abstract : During a 9-month period the results of ~~employ-~~  
 ing procaine penicillin (PP) in the feeding of  
 hens were observed on 6000 hens at 15 chicken  
 farms in Czechoslovakia. Procaine penicillin  
 was added in a dose of 5 mg to each kg of feed.  
 The control and the experimental groups of  
 hens were kept under the same conditions. At  
 some of the farms, the egg productivity of  
 hens which received PP rose by 5-25 percent.  
 In February it was higher by 27 percent, in  
 March by 24.4 percent, in April by 12.9 per-  
 Card: 1/3

Country	: USSR
Category	: Farm Animals. Poultry.
Abs. Jour	: Ref Zhur-Biol., No 21, 1958, 96916
Author	:
Institut.	:
Title	:
Orig Pub.	:
Abstract	: cent, in May by 7.8 percent, in June by 10 percent, and in September by 19.1 percent. During the entire experimental period the disparity of egg weights was 1.4 percent higher for the experimental group. The weight of the egg albumen was higher in the experimental group than in the control group. The egg-yolk of the former contained almost twice as much beta-carotene and carotinoids. In incubation, 21.2 percent more eggs were excluded from the eggs of
Card:	2/3
	3/3

USSR/Farm Animals. Swine.

Q-2

Abs Jour: Ref Zhur - Biol., No. 22, 1955, 101184

Author : Myuller, Zdenek

Inst : -

Title : Some Results in Testing Antibiotics for the  
Fattening of Swine.

Orig Pub: Za stas. s.-kh. nauku, 1957, A6, No. 4, 34-368

Abstract: This paper points out that for some fattening  
procedures the use of chlortetracycline is  
more effective than the use of penicillin.  
With chlortetracycline feed preparations,  
average weight gains were increased by 14  
percent, whereas penicillin feed salts increased  
them by only 9 percent.

Card 1/1

L 61677-65 EWT(l)/EWT(m)/ENG(m)/ENP(t)/ENP(b) PI-4 IJP(c) RDW/JD  
 ACCESSION NR: AF5011114 UR/0051/65/018/004/0622/0627  
 535.373.1 39  
 38  
 AUTHOR: Myller-Buchanan, G.; Vittman, G.  
 TITLE: On the fluorescence of rare earths. II. Emission spectra of phosphors based on borate and activated with cerium and samarium  
 SOURCE: Optika i spektroskopiya, v. 18, no. 4, 1965, 622-627  
 TOPIC TAGS: rare earth, fluorescence, borate, luminor, emission spectrum, activator  
 ABSTRACT: Part I of the article was published in Opt. i spektr. v. 18, 432, 1965. This part is devoted to an investigation of the redistribution of energy in samarium, resulting from sensitization with cerium, inasmuch as this redistribution has not been previously explained. A comparison of the emission spectra of the metaborates of group II elements activated with cerium and samarium and excited with ultraviolet has shown that all such phosphors have a similar line spectrum, which is characteristic of fluorite-type structures. The energy redistribution in the samarium spectrum is the result of competition between two fluorescence-prone sys-

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ACCESSION NR: AP5011114

tems. The  $\text{CeO}_2$ -Sm phase produced in the initial main lattice has a large fluorescence intensity, while the less intense samarium spectrum, characteristic of the main lattice, becomes suppressed. Study of the emission spectra of borates roasted in a reducing atmosphere shows that samples that are recrystallized from the melt or are strongly sintered when the initial mixture is roasted do not contain any more phases with fluorite structure. Doubts are cast on the existence of a tetravalent-cerium borate produced by reaction in the solid phase. Orig. art. has: 5 figures.

ASSOCIATION: Institute of Physical Chemistry, Greifswald University (E. Germany)

SUBMITTED: 14 Mar 64

ENCL: 00

SUB CODE: OP, IC

NR REF SOW: 006

OTHER: 013

*llc*  
Card 2/2

MYULLERBEK, Ye. Kh. Cand Med Sci -- (diss) "On the ~~Problem of~~  
~~the~~ Diagnostic Importance of V. A. Val'dman's Jar Test in ~~Some~~  
Children, ~~Illnesses~~." Len, 1957. 16 pp 20 cm. (Len State  
Pediatric Medical Inst), 100 copies (KL, 18-57, 98)

MYULERBEK, Ye.Kh.

V.A. Val'dman's cupping test. Vop.okh.mat. 1 det. 3 no.3:63-66 JI-Ag '53

1. Iz kafedry gosital'noy pediatrii (zav. - prof. A.F.Tur) Leningrad-  
skogo gosudarstvennogo pediatricheskogo meditsinskogo instituta (dir.-  
prof. N.T. Shutova).

(ENDOCARDITIS)

MYULLERBAK, Ye.Kh.

Clinical and diagnostic significance of Waldman's cupping glass test in the clinical treatment of children's diseases [with summary in English]. *Pediatrics* 36 no.1:60-67 Ja '58. (MIRA 11:2)

1. Iz kafedry gosital'noy pediatrii (zav. - deystvitel'nyy chlen ANN SSSR zasluzhennyy deyatel' nauki prof. A.F.Pur) Leningretskogo pediatricheskogo meditsinskogo instituta (dir. - prof. N.T.Shutova)  
(BLOOD--EXAMINATION)

L 43881-65 EWT(1)/EWT(m)/EWT(b)/EWT(t) P1-4 IJP(c) JD/cg

ACCESSION NR: AP5006429

8/0051/65/018/003/0432/0439

AUTHOR: Mueller-Buschbaum, G.; Vittmann, G.

TITLE: Fluorescence of rare earths. I. Initial spectra of samarium in phosphors based on borate compounds of group II of the periodic system 27

SOURCE: Optika i spektroskopiya, v. 18, no. 3, 1965, 432-439

TOPIC TAGS: Fluorescence, rare earth, initial spectrum, samarium, luminor activator, borate compound, group II element

ABSTRACT: The method of line fluorescence of rare-earths, proposed by R. Tomaschek (Ergebn. Exakt. Naturwiss. v. 20, 268, 1942), is used for an analysis of the emission spectra of samarium borates of the II group of the periodic system, which can not be investigated by x-ray diffraction. The substances studied were borates of calcium, strontium, barium, beryllium, and magnesium, as well as eutectics of borate compounds and non-stoichiometric complicated products of calcination with elements of group II. The excitation was with ultraviolet light. The experimental data are drawn from the literature. The line spectra of samarium emission were also used to obtain data on less characteristic bands of the emission spectrum of

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L 43881-65

ACCESSION NR: AP5006429

already known borate luminors activated with lead and thallium. The data are used to investigate the influence of the host lattice on the activator. The emission phosphors of borate activated with lead are compared with those activated with samarium. The results show that within the II group the effect of the microcrystalline force field on the activator ion increases from beryllium to barium. The use of different phosphor compositions but identical cations intensifies the interaction between activator and the host lattice on going from acid to base borates. The smaller the disturbance of the activator ion by the crystal field, the shorter the wavelength of the radiation. Very high activator concentrations can produce intrinsic long-wave radiation. The eutectics emit both bands in the spectrum simultaneously, meaning that the term levels corresponding to each component can exist separately. Orig. art. has: 6 figures and 1 table.

ASSOCIATION: Institute of Physical Chemistry, Greifswald University, GDR

SUBMITTED: 16Mar64

ENCL: 00

SUB CODE: OP,IC

NR REF ROW: 001

OTHER: 041

Card 2/2

ACCESSION NR: AP5017978

UR/0251/64/036/002/0409/0414

AUTHOR: Myul'man, E. R.

TITLE: Study of the strength and deformation properties of concrete produced with Tedzomite aggregate

SOURCE: AN GrusSSR Soobshcheniya, v. 36, no. 2, 1964, 409-414

TOPIC TAGS: concrete, nonmetal compressive strength, nonmetal tensile strength, nonmetal elasticity

Abstract: (Paper presented by Academician K. S. SAVRIYEV, 22 May 1964). "Tedzomite" concrete (aggregate of calcined Tedzam tuff) has already been shown to possess superior qualities because of its light-weight aggregate. The present paper is a summary of tests run on various grades of tedzomite concrete, to determine compressibility and elasticity. It was concluded that (1) tedzomite concretes have high specific strength in the case of the cement ratios studied, (2) they may be assumed to have identical values of prismatic and cubic stability, (3) the ratio of the tensile strength limit to the compressive strength limit can be assumed to conform with the SNIP (Construction Norms and Standards), and (4) the moduli of elasticity

Card 1/2

ACCESSION NR: AP3027978

are 20 to 40% higher than those recommended by the SNIP for lightweight concretes.

The article is accompanied by several tables and a brief bibliography relating to special lightweight aggregates (artificial aggregates and various local natural aggregates). Orig. art. has 5 formulas and 4 tables.

ASSOCIATION: Tbilisskiy gosudarstvennyy nauchno-issledovatel'skiy institut stroitel'nykh materialov, Tbilisi (Tbilisi State Scientific Research Institute of Building Materials)

SUBMITTED: 22May64

ENCL: 00

SUB CODE: MT, ME

NO REF NO: 004

OTHER: 004

JPRS

Card 2/2

Myul'man, E.R.

AID P - 1745

Subject : USSR/Hydraulic Engineering Construction

Card 1/1 Pub. 35 - 4/21

Author : Verbetskiy, G. P. and Myul'man, E. R.

Title : Production of high quality concrete by preliminary vibration of the cement mixture

Periodical : Gidr. stroi., v.24, no.2, 7-9, 1955

Abstract : According to tests made in the Institute of Hydroelectric Construction in Tbilisi and the Tbilisi Railroad Institute a new method of vibrating cement grout and paste was devised. The advantages of using vibrators for obtaining a better frost-resistant and impervious concrete is discussed and the use of small grain sand is recommended. Two tables showing compressive strength of concrete are included, with a schematic diagram showing the process of concrete mixing.

Institution: None

Submitted : No date

NAME P

98-58-7-3/21

AUTHORS: Verbitskiy, G.P., Candidate of Technical Sciences, Yul'-  
man, E.R., Engineer

TITLE: Hydrotechnical Concrete from Vibroactivated Cement (Gidrotekhnicheskiy beton na vibroaktivirovannom tsemente.)

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1958, Nr 7, pp 9-12 (USSR).

ABSTRACT: Cements of brands 300-400 actually delivered to the Soviet building industry are not ground finely enough and therefore their potential possibilities are not fully utilized in the concrete. When ground in vibromills, their activity increases 1.5-2 times. Professor Yu.M. Butt (ref.1) finds that the dimension limit of the grain of cement is in the order of 3 microns. It was also found that excessively fine grained cement is less resistant to frost due to increased water absorption. Lower frost resistance necessitated the application of another technologic process of preparing concrete. The authors describe the method of humid cement activation. It is achieved by mechanical processing of cement suspension, cement dough or cement-sand hard solution from which the concrete is subsequently made. (Ref. 4 and 5). Concrete made from the activated cement possess in-

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Hydrotechnical Concrete from Vibroactivated Cement

86-58-7-3 11

creased strength and density. It is used abroad for separate concreting of hydrotechnical constructions (Ref. 6). Following the suggestion made by Professor Yu.Ya. Shtayerman, the TNISCEI elaborated a new effective method of humid activation of cements, called vibroactivation. It consists of a 10-minute vibroprocessing of cement dough or cement-sand solution of hard consistency. Special research has shown that the vibration of freshly mixed cement dough or solution intensifies the process of dispersion and peptization of cement grains, quickens and increases their hydrolysis and hydration. As a result, an increased number of colloid products is formed in the cement dough, which increases the cement activity. The concrete mixture, prepared from a vibroactivated mixture, which is hard in static state, becomes very movable and tightens quickly. Besides this, the concrete made from such mixture is more durable and resistant. Another feature of the vibroactivating method is a specific action of vibration on the process of the formation of the structure of the concrete. Academician P.A. Rebinder and Professor N.V. Mikhaylov (Ref. 7) find that the vibration of the cement dough delays the formation of a loose aluminate structure and therefore the fine-grained structure is formed after the cessation of vibration. Economic calculations

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Hydrotechnical Concrete from Vibroactivated Cement

98-58-7-3/21

showed that supplementary expenses for electric energy, amortization of the equipment and the manual work are equivalent to 3-5% of the value of the cement but the application of the method saves about 15-20% of the cement. The method was substantiated by numerous tests and experiments cited in the article. There are 2 tables, 1 graph, and 9 references, 8 of which are Soviet and 1 German.

ASSOCIATION: TNISGEI

1 Cement--Production    2. Cement--Applications    3. Vibration  
mills--Applications

Card 3/3

S/188/62/000/006/008/016  
B191/B102

AUTHOR: Myunkhov, L.

TITLE: The giant resonance in heavy strongly deformed nuclei

PERIODICAL: Moscow. Universitet. Vestnik. Seriya III. Fizika,  
astronomiya, no. 6, 1962, 37-44

TEXT: The position and width of dipole peaks in photonuclear reactions of strongly deformed nuclei of the rare earths are calculated in second-quantization approximation. Considering the residual interaction between the nucleons, the energy of the dipole peaks can be determined from a system of equations, of which one approximate solution is given. (Interaction terms between various particles are considered only). Strongly deformed axisymmetric nuclei are calculated from the solutions, assuming the values for the last oscillator shell of the protons and neutrons were assumed to be respectively  $N = 4$  and  $N = 5$ . The case of a nonaxisymmetric nucleus is dealt with also. The possibility of a splitting of the second peak in consequence of deviation from the axial symmetry is considered. Calculations with real nucleon configurations are in preparation.

Card 1/2

The giant resonance in heavy...

S/188/62/C00/006/008/016  
B191/3102

ASSOCIATION: NIIYaF

SUBMITTED: March 27, 1962

Card 2/2

MYUNTS, A.

Preparation of a water-oil emulsion in an emulsifier. Sel'. stroi.  
no.5:21 My '62. (MIRA 15:7)

1. Glavnyy mekhanik tresta Barnaultselinstroy.  
(Paint mixing)

MYUNSTER, N.S.; MYUNSTER, F.P.

Rotating speed of vertical-spindle cotton pickers. Izv.  
AN Uz.SSR.Ser.tekh.nauk. no.3:29-37 '60.  
(MIRA 13:7)

1. Institut mekhaniki AN UzSSR.  
(Cotton-picking machinery)

MYUNSTER, F.P.

Analytical method of determining the activity of spindles.  
Dokl. AN Uz.SSR 21 no. 10:7-10 '64 (MIRA 19:1)

1. Institut mekhaniki AN UzSSR i Vychislitel'nyy tsentr AN  
UzSSR. Submitted December 18, 1963.

MYUNTSNER, L.

BR

PHASE I BOOK EXPLOITATION

SOV/5975

International Institute of Welding

XII kongress Mezhdunarodnogo instituta svarki, 29 iyunya - 5 iyulya 1959 v g.  
Opatii (Twelfth Annual Assembly of the International Institute of Welding,  
Opatija, June 29 - July 5, 1959) Moscow, Mashgiz, 1961. 359 p. 3000  
copies printed.

Sponsoring Agency: Natsional'nyy komitet SSSR po svarke.

Ed. (Title page): G. A. Maslov, Docent; Translated from English, French,  
and Serbo-Croatian by N. S. Aborenkova, K. N. Belyayev, E. P. Bogacheva,  
L. A. Borisova, K. V. Zvegintseva, V. S. Minavichev, and M. M. Shelechnik;  
Managing Ed. for Literature on the Hot-Working of Metals: S. Ya. Golovin,  
Engineer.

PURPOSE: This collection of articles is intended for welding specialists and  
the technical personnel of various production and repair shops.

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Twelfth Annual Assembly (Cont.)

SOV/5975

COVERAGE: The collection contains abridged reports presented and discussed at the Twelfth Annual Assembly of the International Institute of Welding. Reports deal with problems of welding and related processes used in repair work, repair techniques, and the problems arising in connection with the nature of the base and filler materials. Examples of repairing various parts are given, and the organization of repair operations in workshops and under field conditions is discussed. Economic aspects of welding and related processes as used in repair work are analyzed. No personalities are mentioned. There are no references.

TABLE OF CONTENTS: [Only Soviet and Soviet-bloc reports are given here]

Foreword

5

PART I. THE STUDY OF REPAIR-WORK TECHNIQUES  
(PROCESSES, METHODS, PREPARATION, HEATING, AND  
OTHER TYPES OF PROCESSING CONTROL)

Myuntsner, L. (Czechoslovakia). Welding of Broken Crankshafts

36

Card 2/9

SALIMOV, A.; MYUNSTER, N.; KHODOSHCHENOV, K.

Using an oscillograph in testing electric equipment of  
vehicles. Avt. transp. G. no. 10:26-27 (1967).

(MIRA 1:111)

MYUNSTER, N.S.; MYUNSTER, F.P.

Rotating speed of vertical-spindle cotton pickers. Izv.  
AN Uz.SSR.Ser.tekh.nauk. no.3:29-37 '60.  
(MIRA 13:7)

1. Institut mekhaniki AN UzSSR.  
(Cotton-picking machinery)

MYURBERG, V.K., inzh.; PLAVEL'SKIY, I.V., inzh.

Sectional reinforced-concrete supports made of thin-walled,  
three-dimensional elements for lining major mine workings.  
Krepl. gor. vyr. ugol'. shakht no. 1:133-140 :57. (MIRA 11:7)

1. Karagandagiprosnakht.  
(Mine timbering)  
(Reinforced concrete construction)

MYURBERG, V.K., inzhener; ZIZNEBERG, G.K., inzhener.

Manufacturing reinforced concrete pipes by the drawn vibration  
core method. Shakht.stroi. no.5:16-18 My '57. (MIRA 10:7)

1. Institut Karagandagiprosnakht.  
(Pipe, Concrete)

MYURBERG, V.K., inzh.

Reinforced concrete ties without embedded elements. Shakht.

stroil. no.4:20-21 '58.

(MIRA 11:6)

(Mine railroads) (Railroads--Ties)

ZIZENBERG, G.K., inzh.; MYUREBERG, V.K., inzh.

Small one-cylinder hydraulic jack for mechanized lifting of  
sliding forms. Nov. tekhn. i pered. op. v stroi. 20 no.2:12-15  
P '58. (MIRA 11:2)  
(Pipe, Concrete)

MYURBERG, V.K., inzh.; ZIZENBERG, G.K., inzh.; HOGOZOV, V.Ye., inzh.

Constructing electric transmission and communication lines  
using precast reinforced concrete tubular supports. Nov.tekh.  
mont.i spets.rab.v stroi. 21 no.11:15-18 N '59.  
(MIRA 13:2)

1. Giprouglemash i trest Karagandashakhtostroyontazh.  
(Electric lines--Poles) (Precast concrete construction)

25.1000  
15.3200

80522

S/097/60/000/05/03/016

AUTHORS: Myurberg, V.K., Zizenberg, G.K., Engineers

TITLE: Production of Reinforced Concrete Structural Pipes by Means of an  
Inserted Vibrating Core

PERIODICAL: Beton i Zhelezo-Beton, 1960, No. 5, pp. 202 - 208

TEXT: The authors of the article have developed a method, whereby reinforced concrete pipes used for structural purposes can be produced in series in a special installation, capable of turning out 80 to 100 pipes during 24 hours. These pipes have a length of 6 m at a diameter of 200 and 300 mm, and serve mostly as supports for power lines and for street lamps. The novelty of the new method consists in the use of a vibrating core which is inserted into the pipe and consolidates the concrete by means of internal vibration of the core. Another distinctive feature of this method consists in the vertical position of the pipe in the course of production, which is done in a dismountable mold. The vibrating core consists of two parts - the head with a built-in vibrating device and the core which acts as sliding casing inside the mold. After the metal reinforcement is inserted in the form the vibrating core starts operating from the bottom of the mold, while concrete

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Production of Reinforced Concrete Structural Pipes by Means of an Inserted Vibrating Core

is being fed from the top; to complete a pipe 6 m long takes from 4 to 8 minutes. After the core has been removed, thermal treatment starts by applying steam into the hollow of the pipe during 4-5 hours; the pipe is now ready to be demolded. thermal treatment is being continued in the steam chamber. In the Karaganda Giproskhkh Institute 2 models of installations have been developed - ATV 300/6.5 - 200/6.5 and ATV 300/7.5 - 200/7.5. Each installation consists of two vertical boring and turning machines, one machine containing 16 molds for pipes of 300 mm in diameter and the other for pipes of 200 mm. Both machines have one upper plate in common, from which the feeding of concrete takes place. Between the two machines is a pit, which holds two vibrating core units, one for each machine. A mechanism is regulated in such a way that it turns the machine 1/16 part of the circumference each time a new form is put in place for processing. A steam distributor supplies steam for thermal treatment of the pipes providing for 13 stages at varying temperatures during 4-5 hours. There is a special lifting device which takes the mold out of the machine for demolding, cleaning, greasing and preparing for a new cycle of operation. The new improved type of installation has a

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Production of Reinforced Concrete Structural Pipes by Means of an Inserted Stressing Core

capacity of 48 pipes per shift. Steam consumption is 100 kg per hour. There are two 26.4 kw electric motors, one for each machine. The Karaganda Institute Giproblegormash has elaborated and designed equipment for an automated plant for the production of reinforced concrete pit props, having a capacity of 500 props per 24 hours; a special machine turns out welded carcasses in accordance with M.V. Kvasov's system. The article describes also another type of installation for the production of prestressed pipe sections up to 500 mm in diameter. A chain conveyer carries the molds after molding through the steam chamber, where the thermal treatment takes place in 3 stages of varying temperatures. An alternative method of Professor V.V. Mikhaylov provides for the employment of a special grade of fast-setting stressing cement, which eliminates the equipment required for prestressing the metal reinforcement and for thermal treatment in a steam chamber. After being demolded the pipe sections are plunged for 3-6 hours in a

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Production of Reinforced Concrete Structural Pipes by Means of an Inserted Vibrating Core

water bath at 70-80°C. The vibrating core method permits maximum mechanization and automation of the technological process of producing reinforced concrete pipes, cutting down on production cost about 30.40%, while doubling the productivity of labor. There are 4 photographs, 2 diagrams, 1 graph and 2 tables.

Card 4/4

LARTSEV, G.G.; MYURBERG, V.K.

Conditions for the support of workings in the new sections of the  
Karaganda Basin. Ugol' 35 no.7:25-28 J1 '60.

(MIRA 13:7)

(Karaganda Basin--Mine timbering)

MYURBERG, V.K., inzh.

Prestressed block-type mine timbering. Shakht. stroi. 5  
no. 3:11-12 Mr '61. (MIRA 14:2)

1. Giprouglegormash.  
(Mine timbering) (Prestressed concrete)

MYURBERG, V.K., inzh.

Design of lattice steel headframes. Ugol' Ukr. no.6:23 Je '61.  
(MIRA 14:7)

1. Giprogoruglemash.  
(Hoisting machinery)

MYURK, Kherman Yur'yevich; UDAL'TSOV, A.N., glavnyy redaktor; LEVIN, G.E.  
~~kandidat~~ ~~tekhnicheskikh~~ nauk, redaktor

[Actinometric rule for determining the coefficient of transparency  
of the atmosphere  $P_m$  and the factor of cloudiness  $T_m$ ]

Aktinometricheskaya lineika dlia opredeleniia koeffitsienta  
prozrachnosti atmosfery  $P_m$  i faktora mutnosti  $T_m$ . Tema 7, no. P-56-454.  
Moskva, Akad. nauk SSSR, 1956. 15 p. (MLRA 10:5)  
(Actinometer) (Atmospheric transparency)

PHASE I BOOK EXPLOITATION

SOV/4466

Akademiya nauk Estonskoy SSR. Institut fiziki i astronomii

Issledovaniya po fizike atmosfery, Vyp. 1 (Research on Atmospheric Physics, No. 1) Tartu, 1959. 107 p. 800 copies printed. [In Russian and English.]

Editorial Board: J. Ross (Chairman), O. Avaste, Kh. Liydemaa, and H. Murk;  
Ed.: Kh. Niylik.

PURPOSE: This publication is intended for geophysicists, meteorologists, and astronomers.

COVERAGE: This is the first issue of a new serial publication put out by the Sektor fiziki atmosfery Instituta fiziki i astronomii AN Estonskoy SSR (Sector of Atmospheric Physics of the Institute of Physics and Astronomy of the Academy of Sciences Estonskaya SSR) on research in the physics of the atmosphere. The publication is to appear at irregular intervals (1 - 2 issues per year) and will, for the most part, contain papers in actinometry. Issue 1 contains articles dealing with radiation intensity and the characteristics of atmospheric transparency, spectral reflectivity of vegetation covers, and a discussion of

Card 1/ 3

Research on Atmospheric Physics, No. 1

SOV/4466

Makhotkin's index of turbidity. No personalities are mentioned. An English summary follows each article. References accompany each article.

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<u>Murk, H.</u> New Formula for Radiation Intensity and New Characteristics of the Transparency of Atmosphere	7
<u>Murk, H.</u> Nomogram for Computing [and Reducing] Certain Characteristics of the Transparency of the Atmosphere	15
<u>Murk, H.</u> Rationality of Makhotkin's Index of Turbidity N	26
<u>Ross, J.</u> Effect of the Radiation of the Solar Aureole on the Calibration of Thermoelectric Actinometers	43
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Research on Atmospheric Physics, No. 1

SOV/4466

Toomig, H. Some Problems Concerning the Distribution of the Total  
Radiation in the Vegetation Cover

83

The author thanks Yu. Ross.

AVAILABLE: Library of Congress

Card 3/3

JA/dwm/gmp  
11-9-60

32281

S/169/61/000/011/041  
D228/D304

3, 5/50

AUTHOR: Myurk, Kh. Kh.

TITLE: A new formula for the intensity of radiation and new characteristics of the atmosphere's transparency

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, 29, abstract 11B214 (V sb. Issled. po fiz. atmosfery, 1. Tartu, 1959, 7 - 14)

TEXT: A formula is introduced that expresses the intensity of the integral flow of direct solar radiation in relation to the number of optical masses  $m$  and the atmospheric transparency. In deriving the formula the author proceeds from the following positions: 1) The atmospheric transparency does not change in a horizontal direction and remains constant during the considered period of the variation of  $m$ ; 2) The coefficient of weakening of the integral flow of radiation depends on  $m$ ; and 3) The change in the coefficient of weakening  $k$  is proportional to the change in the number of atmospheric masses  $dm/m$ . The formula has the form  $S_m = S_{op} m^{B_m}$ , where  $S_m$  is

Card 1/2

A new formula for the intensity ...

32281  
S/169/61/000/011/043000  
D228/D304

the radiation intensity when the number of layers is  $m$ ,  $S_0$  is the solar constant, and  $p_1$  is the coefficient of atmospheric transparency when  $m = 1$ . The magnitudes of  $p_1$  and  $B$  depend solely on the atmospheric transparency and thus characterize it quantitatively. Their physical meaning is different: the quantity  $p_1$  characterizes the passage of radiation in a single layer of the atmosphere (when  $m = 1$ ), whereas  $B$  characterizes the decrease in the coefficient of radiation weakening during the increase in the number of layers from  $m$  to  $2m$ . The correctness of the formula is checked by the author. [Abstractor's note: Complete translation].

Card 2/2

S/169/61/000/011/042/065  
D228/D304

AUTHOR: Myurk, Kh. *Kh.*

TITLE: The rationality of the Makhotkin index of turbidity N

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, 29,  
abstract 11B218 (V sb. Issled. po fiz. atmosfery, 1,  
Tartu, 1959, 26 - 42)

TEXT: An appraisal is given for the index of turbidity N proposed by L.G. Makhotkin (RZhFeofiz, no.12, 1957, 10445). For estimating the atmosphere's turbidity characteristics the author suggests application of the following quantitative rational criteria: 1) Sensitivity of the characteristic pertaining to the radiation intensity S, expressed by the quantity  $(1/\pi) (d\pi/dS)$  ( $\pi$  being the turbidity characteristic under investigation); the best of the comparable characteristics for this criterion should be recognized as the one for which the sensitivity to changes in the radiation intensity is greatest; 2) The sensitivity to the change in the number of masses  $m$ , characterized by the term  $(1/\pi) (\partial\pi/\partial m)$ ; the closer this value is

Card 1/3

The rationality of the Makhotkin ...

S/169/61/000/011/042/065  
D228/D304

to zero, the more rational may be considered the application of the given characteristic; 3) The generalizing criterion - the coefficient of rationality of the characteristic under study -

$$r_{\pi} = \frac{(1/\pi)(\partial \pi / \partial S)}{(1/\pi)(\partial \pi / \partial m)}$$


Besides these quantitative criteria, the author takes into consideration the physical sense and simplicity of calculating the characteristics under appraisal. The mean magnitudes of the radiation intensity at different elevations of the sun and at different degrees of atmospheric transparency are used to estimate the rationality for the suggested criteria. The Kastrov coefficient possesses the greatest sensitivity to the radiation intensity. It is followed by the Makhotkin index of turbidity N. The remaining characteristics are less sensitive. The Myurk index B has the least sensitivity for m. It is followed by Makhotkin index of turbidity N. The remaining turbidity characteristics are more sensitive to changes in m. These results, as well as the numerical values of the coefficient of rationality  $r_{\pi}$ , testify to the fact that the Makhotkin index

Card 2/2

The rationality of the Makhotkin ...

S/169/61/000/011/042/063  
D228/D304

turbidity N should be recognized as one of the most rational characteristics of the atmosphere's turbidity. A nomogram, enabling the magnitude of the Makhotkin index of turbidity to be rapidly and sufficiently accurately calculated from known values of S and m, is appended to the article. [Abstractor's note: Complete translation]



Card 5/5

MYUSKOV, V. F.

"X-ray topographic study of magnesium oxide crystals."

report submitted for 6th Gen Assembly, Intl Union of Crystallography, Rome,  
, Sep 63.

Inst Crystallography, Moscow.

GAVRILOV, A.M.; MYUYR, V.M.

[Methods of increasing labor productivity in tool making] Puti povysheniia  
proizvoditel'nosti truda v priborostroenii. Moskva, Gos.nauchno-tekhn.izd-  
vo mashinostroit.lit-ry, 1953. 238 p.

(MLA 6:8)

(Machine-tool industry)

PHASE I BOOK EXPLOITATION

1121

Gavrilov, Anatoliy Nikolayevich and Myuyr, Valentin Nikolsyevich  
Rezervy i puti povysheniya proizvoditel'nosti truda v priborostroyenii  
(Potentials and Means for Increasing Labor Productivity in Instrument  
Manufacture) Moscow, Mashgiz, 1958. 642 p. 2,500 copies printed.

Reviewers: Polyakov, N.I., Professor and Galoy, M.T., Candidate of  
Technical Sciences; Ed.: Avrutin, S.V., Docent; Ed. of Publishing  
House: Salyanskiy, A.; Tech. Ed.: Uvarova, A.F.; Managing Ed. for  
Literature on the Economics and Organization of Production (Mashgiz):  
Saksaganskiy, T.D.

PURPOSE: The book is intended for engineering and technical personnel of the  
instrument manufacturing industry.

COVERAGE: This book discusses basic ways and means for increasing labor pro-  
ductivity in instrument manufacturing operations and it covers the full  
production cycle including the design and developmental phase of engineering  
processes as well as actual manufacturing of the final product. Modern  
methods of casting and pressure forming, making plastic parts, machining  
metal parts, and assembling instruments are fully described and discussed.

Card 1/11

Potentials and Means (Cont.)

1121

Methods of overall automatization of production processes are reviewed and explained. There are 49 references of which 47 are Soviet, 1 German, and 1 reference to non-Soviet magazines.

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Card 2/ 11

MADEIRA, N.V.

Reaction involved in the formation of aluminum  
hydroxide. Sect. AN Gruz. SSK 31 no. 2:49. Ag '63.  
(MIA, 1967)

MYZDPKH, T. YE.

Steam Turbines- Lubrication

Improving the work of an oil separator. Rab. energ. 2, no. 6, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.

SOV-91-58-4-16/29

AUTHOR: Myzdrik, F.Ye., Electric Installation Worker

TITLE: A System for the Installation of "MKP-160" Type Oil Switches and Current Transformers (Konstruktsiya dlya ustanovki transformatorov toka vyklyuchateley MKP-160)

PERIODICAL: Energetik, 1958, Nr 4, p 21 (USSR)

ABSTRACT: The author designed a simple and reliable system for the installation of "MKP-160" type oil switches and current transformers. This operation can be very laborious because of the large weight of the transformers (about 200 kg). The described system utilizes a distance wedge and an automatic crane.  
There are 2 diagrams.

1 Switches--Installation 2. Transformers--Installation

Card 1/1

SHLAIN, I.B., kand.tekhn.nauk; MYZDRIKOV, Yu.A., inzh.; AVERCHENKOV, A.P.,  
inzh.

Improving drilling and blasting operations at quarries. Sbor.  
trud. NIIZHelezobetona no.7:17-34 '62. (MIRA 16:1)  
(Quarries and quarrying)

AVERCHENKOV, A.P., inzh.; KRITSKIY, V.G., inzh.; MYZDRIKOV, Yu.A., inzh.

Improving boring and blasting at quarries. Stroi. mat. 9 No.2:7-10  
F '63.

(MIRA 16:2)

(Boring)

(Blasting)

(Quarries and quarrying)

18.3000

1977  
USSR

AUTHORS

Myzenko, D. K., P. M. ... M. M. ... M. ...  
[Engineers]

TITLE:

Purification of Gaseous Phase in a ...  
Elevated Pressure ... With ...

PERIODICAL:

Stal', 1977, No. 11, ... (USSR)

ABSTRACT:

Electric gas purification is discussed in the ...  
to a design of the State Institute for the Design and  
Planning of Gas Purification Structures (Giprogazdizlen)  
has failed to produce the expected results. From 1965  
to 1968 the authors have studied optimal modes of gas  
purification in cooperation with the personnel of the  
Ural branch of the State All-Union Trust for the Design,  
Planning, Assembly and Adjustment of Plant Installation  
and Control and Monitoring Instruments of the Ministry of  
Heavy Metal Industry of the USSR. The authors have  
efficiency of absorber, Venturi pipe, and ...  
filter and illustrated with reference to ...

Card 1/1

Purification of Blast Furnace Gas  
Furnace Winding at Elevated Pressure  
and With Enriched Blast

1971  
Soviet Union

Following is a description of the test results in gas at blast,  
(1) gas, (2) gas, and (3) water and power used. During  
the test period gas pressure under the furnace was 1.5  
atm. and, in addition, the pressure of the gas was 1.5  
atm. (1.5 atm. blast, 1.5 atm. blast, and 1.5 atm. blast).  
The test results of the furnace and the  
following results are given: (a) blast furnace  
dust:  $\text{SiO}_2$ , 17.52;  $\text{Al}_2\text{O}_3$ , 1.15;  $\text{CaO}$ , 1.11;  $\text{MgO}$ , 1.11;  
 $\text{MnO}$ , 1.11;  $\text{FeO}$ , 2.11;  $\text{Fe}_2\text{O}_3$ , 20.44; S, 0.12; P, 0.12;  
others, 20.31; (b) blast furnace gas:  $\text{CO}$ , 1.11;  $\text{CO}_2$ ,  
1.11;  $\text{CH}_4$ , 1.11;  $\text{H}_2$ , 1.11;  $\text{N}_2$ , 1.11. The results tested  
(1) Standard winding at high pressure gas (1.5 atm. blast  
atm. gas under top). By passing max. 1.5 atm. blast  
through the furnace, resistance increased 1.11 atm.  
water and, in addition, pressure was 1.5 atm. under  
column at normal pressure. The results of the test are

Card 2/7

Purification of Blast Furnace Gas  
 Furnace Working at Electric Power  
 and With Enriched Blast

1971  
 100-100000

extent of gas purification in the blast furnace and the  
 fully initial need by the dust content of the gas. Under  
 plant conditions, initial gas purification efficiency  
 (96%) was achieved with water consumption of 2.5 m<sup>3</sup>/ton  
 of gas. Further decrease in water consumption and  
 purification efficiency. It is shown that the efficiency  
 of the purification is higher at lower temperatures  
 and higher rates of gas flow. The rate of heat transfer  
 is considerably higher (10-15%) at lower temperatures  
 after purifying the gas by means of water. The water  
 should not be used in the blast furnace. The purification  
 (96 to 97%) in initial purification (96 to 97%)  
 Increased dust content of the gas. At increased  
 water consumption pipe resistance increases proportionally  
 to the content of dust in the gas. The resistance of the  
 water pipe. Dust content in the gas is determined by  
 carried up water in the gas. In the blast furnace  
 increased speed with smaller dust content. Increased  
 Venturi pipe efficiency of 10-15% (2) 100-100000

0001-100000

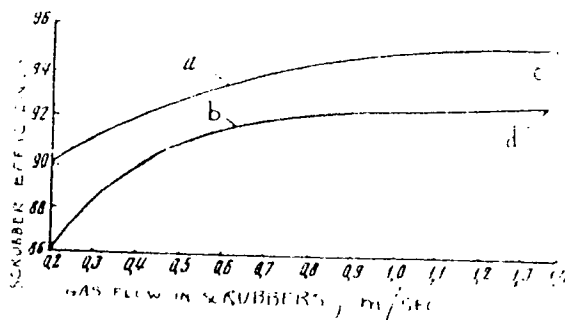


Fig. 4. Scrubber efficiency versus gas flow velocity: (a) gas flow velocity 0.25 m/sec, scrubber load 100,000  $m^3/hr$  with 100,000  $m^3/hr$  load at 100,000  $m^3/hr$  (scrubber capacity of 300  $m^3/hr$ ); (b) same, scrubber load 100,000  $m^3/hr$ ; (c) same, scrubber load 100,000  $m^3/hr$ ; (d) same, scrubber load 100,000  $m^3/hr$ , water flow velocity 1.5 m/sec, scrubber capacity 300  $m^3/hr$ ; (e) same, scrubber load 100,000  $m^3/hr$ , water flow velocity 1.5 m/sec, scrubber capacity 300  $m^3/hr$ .

Card 4/7

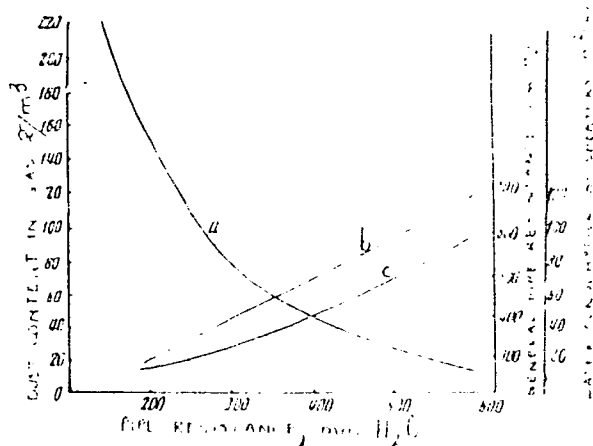


Fig. 1: Relationship between (a) Venturi pipe resistance; (b) total pipe resistance and water consumption by spiral sprayer; (c) water consumption by spiral sprayer.

Card 1/7

Purification of Blast Furnace Gas in  
 Electric Working at Electrolytic Plant  
 and with Enriched Air

Filters tested showed that the gas was not  
 filters required repair. However, filters were  
 reliably for a minimum of 100 hours. The  
 filtration efficiency was not affected by the  
 throttle water flow rate. The filters were  
 after treatment, while the throttle water flow  
 period of 100 hours. The filters were  
 applied to the gas duct in front of the  
 unit; as a result, the dust content did not exceed  
 to 1 mg/m<sup>3</sup> with gas pressure under the top of the  
 gaps. Gas contamination was reduced to 10  
 mg/m<sup>3</sup> and the required water consumption was  
 m<sup>3</sup>/hr by placing the waterline behind the top of  
 unit so the water jet was directed toward the  
 flow. In a new furnace, before the full water  
 features were installed, the gas was  
 pipes with 40 mm diameter. The gas was  
 sprayed through the pipes. The gas was  
 furnace had been a water jet in the pipes.

Card 1/1



MYZENKO, D.K., inzh.; POMAZUYEV, V.M., inzh.; MIRONCHIK, M.S., inzh.;  
KOROL'KEVICH, L.Yu., inzh.

Purification of blast furnace gas without electrostatic filters.  
Stal' 20 no. 7:667-670 J1 '60. (MIRA 14:5)

.1. Chelyabinskiy metallurgicheskiy zavod.  
(Gases—Purification)

L 26073-66 EPF(n)-2/EWT(m)/I/EWP(w)/EWP(t) WW/JD/JG/GS

ACC NR: AT6014747

SOURCE CODE: UR/0000/65/000/000/0039/0043

AUTHOR: Myzenkova, L. P.; Baron, V. V. (Candidate of technical sciences);  
Yefimov, Yu. V.; Savitskiy, Ye. M. (Doctor of chemical sciences)

ORG: none

TITLE: Effect of alloying additions on the superconductivity of niobium-zirconium alloys

SOURCE: Soveshchaniye po metallovedeniyu i metallofizike sverkhprovodnikov. Ist., 1964. Metallovedeniye i metallofizika sverkhprovodnikov (Metallography and physics of metals in superconductors); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 39-43

TOPIC TAGS: superconductivity, alloy superconductivity, niobium alloy, zirconium containing alloy, lanthanum containing alloy, cerium containing alloy, iron containing alloy, titanium containing alloy, superconductive alloy

ABSTRACT: The effect of small additions of cerium, lanthanum, titanium, and iron on the critical current density ( $I_k$ ) of niobium-zirconium alloys has been investigated. Alloy wires 0.25 mm in diameter, containing 25 and 50 wt% Zr and up to 0.36% La, 0.39% Ce, 5.44% Ti, or 0.5% Fe individually added, were tested at 4.2 K in a magnetic field of 22.4 kGs. Ti, Fe, La, and Ce at contents of up to 0.1% increased considerably the  $I_k$  of Nb + 50% Zr alloy. At higher contents,  $I_k$  dropped again (see Fig. 1). In the case of Nb + 25% Zr alloy, the maximum on the  $I_k$ -composition curves was

Card 1/3

L 26073-66

ACC NR: AT6014747

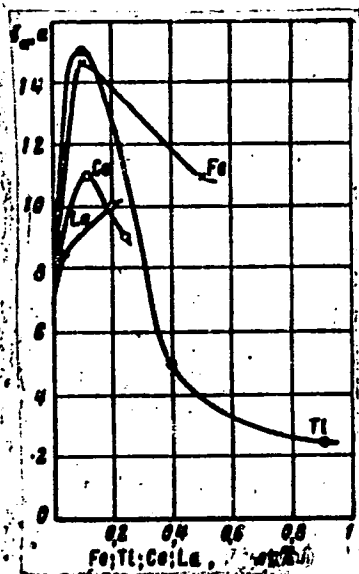


Fig. 1. Critical current of Nb + 50% Zr alloy versus content of alloying addition at an intensity of the magnetic field of 22.2 kGs.

observed at higher contents of alloying elements, for instance, at 1% titanium, but the effect was much weaker than in alloy with 50% Zr. The effect of higher content of alloying elements was studied with alloys containing 5 and 10% Ti and 20—45% Zr.

Card 2/3

L 26073-66

ACC NR: AT6014747

At 5% Ti the maximum  $I_k$ ,  $4.45 \cdot 10^4$  a/cm<sup>2</sup>, was observed at 28% Zr and in alloys with 10% Ti, at 25% Zr ( $I_k$ ,  $3.65 \cdot 10^4$  a/cm<sup>2</sup>). Ti, La, and Ce improved and Fe did not affect the workability of alloys. Annealing at 900 C for 1 hr had a beneficial effect on the  $I_k$  of alloys with 25% and 50% Zr containing La and Ce. Orig. art. has: 4 figures.

[WW]

SUB CODE: 11/ SUBM DATE: 23Dec65/ ORIG REF: 003/ OTH REF: 001/ AND PRESS:

4253

Card 3/3 CC

L 38535-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG/GD

ACC NR: AT6014755

SOURCE CODE: UR/0000/65/000/000/0086/0088

AUTHORS: Baron, V. V. (Candidate of technical sciences); Myzenkova, L. F.;  
Savitskiy, Ye. M. (Doctor of chemical sciences)

ORG: none

TITLE: The phase diagram of the niobium-gallium system

SOURCE: Soveshchaniye po metallovedeniyu i metallofizike sverkhprovodnikov. Ist, 1964. Metallovedeniye i metallofizika sverkhprovodnikov (Metallography and physics of metals in superconductors); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 86-88

TOPIC TAGS: alloy phase diagram, niobium base alloy, gallium alloy, hardness, solid solution, x ray analysis, thermal analysis

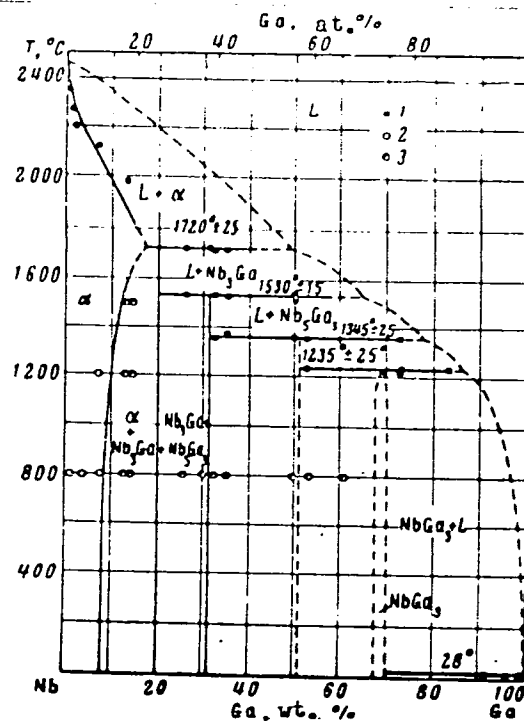
ABSTRACT: A phase diagram is constructed for the niobium-gallium system. The work was done because there are no data on the diagram in the literature. The methods of microstructural, thermal, and x-ray analysis, and also the microhardness method were used. Alloys with up to 40 wt % gallium were prepared in an arc furnace in a helium atmosphere. The starting materials were gallium with a purity of 99.99% and sintered niobium (99.7%). After annealing, individual alloys were hardened from 800C (30 hrs) and 1200C (30 hrs). It was found that, besides the known compound Nb<sub>3</sub>Ga, three additional compounds are formed in the system: Nb<sub>5</sub>Ga<sub>3</sub> (31.08 wt % Ga), ~Nb<sub>2</sub>Ga<sub>3</sub> (~51 wt % Ga), and NbGa<sub>3</sub> (69.20 wt % Ga) (see Fig. 1). The microhardness of the compounds

Card 1/2

L 38535-66

ACC NR: AT6014755

Fig. 1. Phase diagram of Nb-Ga system:  
1 - data of thermal analysis;  
2 - single-phase alloys;  
3 - two-phase alloys.



was also determined. Orig. art. has: 2 graphs.

Card 2/2 SUB CODE: 11/ SUBM DATE: 23Dec65/ ORIG REF: 002/ OTH REF: 003

ACC NR: AP6013371

SOURCE CODE: UR/0370/66/000/002/0163/0165

AUTHOR: Myzenkova, L. F. (Moscow); Baron, V. V. (Moscow); Savitskiy, Ye. M. (Moscow)

ORG: none

TITLE: Phase diagram of the niobium-antimony system

SOURCE: AN SSSR. Izvestiya. Metally, no. 2, 1966, 163-165

TOPIC TAGS: alloy phase diagram, niobium alloy, antimony alloy

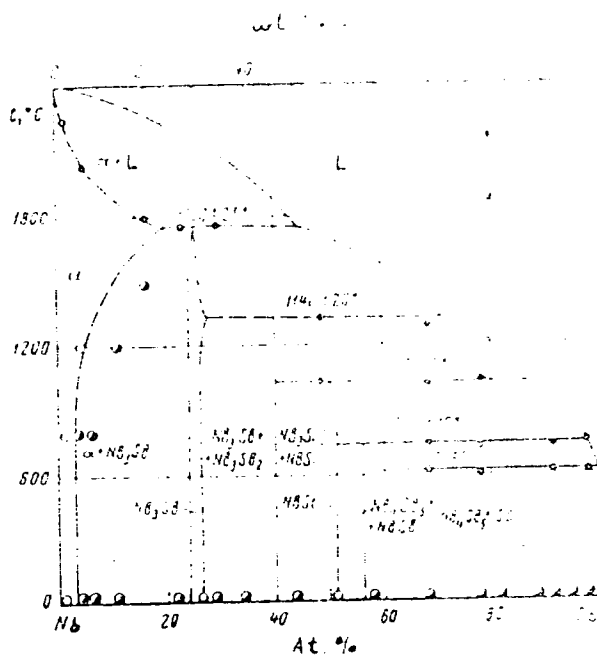
ABSTRACT: Microstructural, thermal, and x-ray methods as well as microhardness measurements were used to plot the phase diagram of the Nb-Sb system. Four compounds were identified in this system:  $\text{Nb}_3\text{Sb}$  (75.00 at.% Nb),  $\text{NbSb}$  (50 at.% Nb), and apparently also  $\text{Nb}_3\text{Sb}_2$  (60 at.% Nb) and  $\text{Nb}_4\text{Sb}_5$  (44.4 at.% Nb). All the compounds are formed by peritectic reactions taking place at 1750, 1140, 1120, and 760°C respectively. The microhardness of alloys based on the compound  $\text{Nb}_3\text{Sb}$  amounts to 668-490 kg/mm<sup>2</sup>, which indicates the presence of a region of solid solution based on this compound; the microhardness of  $\text{NbSb}$  is 235, and that of  $\text{Nb}_4\text{Sb}_5$  is 170 kg/mm<sup>2</sup>. X-ray structural analysis confirmed that the compound  $\text{Nb}_3\text{Sb}$  has a cubic lattice with constant  $a=5.26$  Å.  $\text{NbSb}$  has a hexagonal lattice ( $a=4.27$  Å,  $c=4.14$  Å,  $a/c=1.276$ ) belonging to the  $\text{NiAs}$  type. Niobium lowers the melting point of antimony, forming with it a eutectic (610°C) whose composition is displaced toward antimony.

Card 1/3

UDC: 669.017.12

ACC NR: AP6013371

Fig. 1. Phase diagram of the Nb-Sb system: 1 - data of thermal analysis; 2 - single-phase alloys; 3 - two-phase alloys.



Card 2/3

L 38960-66

ACC NR: AP6013371

(pseudoeutectic). The phase diagram of the Nb-Sb systems is in many respects analogous to that of elements of group Va (V, Nb) with elements of group IIIb (Fe, Co, Ni). Orig. art. has: 2 figures.

SUB CODE: 11/ SUBM DATE: 16May64/ ORIG REF: 003/ OTH REF: 001

Card 3/3

KRIGMONT, V.D., inzh.; MYZIKOVA, N.M., inzh.

Comparative tests of the burners of boilers operating with  
hammer mills. Elek. sta. 35 no.2:6-9 F '64. (MIRA 17:6)



L 20683-65 BMT(u)/BWP(u)/BWP(t) ITP(c) 3D  
 ACCESSION NR: AP4044811 8/0078/64/009/009/2170/2173

AUTHOR: Baron, V. V.; My\*zenkova, L. F.; Savitskiy, Ye. M.;  
 Gladyshevskiy, Ye. I. B

TITLE: The niobium-gallium system

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 9, 1964, 2170-2173

TOPIC TAGS: niobium gallium system, microstructure, microhardness, thermal analysis, x ray analysis, phase diagram, solid solution

ABSTRACT: The Nb-Ga system was subjected to microstructural, microhardness, thermal and x-ray analyses, the phase diagram was constructed (fig.1, incl). Limited solid solutions based on Nb were formed: at 800C, 8-10% Ga dissolved in Nb, at the peritectic temperature, 16 wt. % of Ga dissolved. In addition to the known Nb<sub>3</sub>Ga (melting 1720 C; Cr<sub>3</sub>Si type structure; microhardness of 850 kg/mm<sup>2</sup>), the following three compounds were found: Nb<sub>2</sub>Ga<sub>3</sub> (melting 1530C; tetragonal structure of the W<sub>5</sub>Si<sub>3</sub> type; 940 kg/mm<sup>2</sup>), NbGa<sub>3</sub> (melting 1235C;

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ACCESSION NR: AP4044811

tetragonal structure of the  $TiAl_3$  type;  $620 \text{ kg/mm}^2$ ), and a compound approximating  $Nb_2Ga_3$  (melting  $1350^\circ\text{C}$ ; structure not interpreted by x-ray data; assumed to exist from thermal analysis data; microhardness  $760 \text{ kg/mm}^2$ ). Nb and Ga are mutually soluble in the liquid state; some solution of Nb in Ga in the solid state is assumed. Orig. art. has: 2 tables and 3 figures

ASSOCIATION: None

SUBMITTED: 05May63

ENCL: 01

SUB CODE: MM, SS

NO REF SOV: 003

OTHER: 002

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ENCLOSURE 01

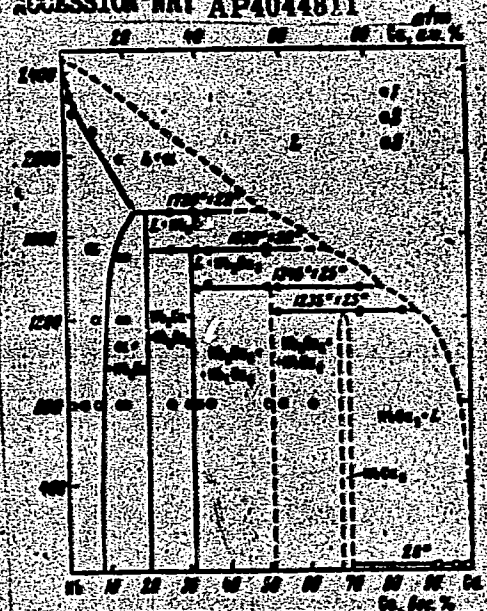


fig. 1

Phase diagram of the niobium-gallium system

1--thermal analysis data; 2--two-phase melts; 3--single phase melt



MYZIN, L.M., inzh.

Using linear regulating transformers on intersystem transits.

Elek.sta. 28 no.10:88-89 '57.

(MIRA 10:11)

(Electric transformers)

BLINOVA, V.N.; DEMIDOV, A.A.; KOLIN, Ya.S.; MAKUSHKIN, Ya.G.; MYZIN, L.M.;  
PERMYAKOV, N.P.; PONEDEILKO, A.I.; BOROVIK, Z.G.; YEFREMOV, I.A.;  
KOPAYGORODSKIY, A.B.; MARINOV, A.M.; MEKHOROSHKOVA, O.I.; POKROVSKIY,  
A.F.; ROMANOVSKIY, A.A.; RASSADNIKOV, Ye.I., red.; SAVEL'YEV, V.I.,  
red.; FRIDKIN, A.M., tekhn.red.

[Electric power in the Urals during the past 40 years] Energetika  
Urals za 40 let. Moskva, Gos. energ. izd-vo, 1958. 141 p.

(MIRA 11:5)

(Ural Mountain region--Electric power)

AUTHORS: 1) Marinov, A. A. Engineer, Lyzin, L. M. 105-58-8-26/33  
Engineer, Petrovsky, A. F., Engineer  
2) Belousov, M. M. Candidate of Technical Sciences

TITLE: The Underlying Principles of the Uniform Power System of the  
European Part of the USSR (Osnovy yedinoi energeticheskoy  
sistemy yevropeyskoy chasti SSSR)

PERIODICAL: Elektrichestvo, 1958, Nr 6, pp. 88 - 91 (USSR)

ABSTRACT: This is a comment on the article by V. I. Veyts in Elektri-  
chestvo, 1957, Nr 1; 1) In the elaboration of a uniform power  
system its scheme must not be projected starting only and  
mainly from large power plants. In spite of the gigantic di-  
mensions in the construction of the hydroelectric power plants  
their specific share in the power economy at the end of the  
sixth five-year-plan will only amount to 18%. At present ther-  
mal power plants with 1 to 1,5 million kW are built in the  
east, at the Ural and in the south. At first the question has  
to be answered: what can more conveniently be conveyed - fuel  
or electric energy? Coal with an ash content of 40% has recent-  
ly be conveyed from the Ekibastuz- basin (75°30' east longitude  
51°40' north latitude) to the Ural. Large thermal power plants

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The Underlying Principles of the Uniform Power System of the  
European Part of the USSR

105-58-0-26/33

should be constructed in the Ekibastuz basin and electric energy should mainly be conveyed to the Ural. Open-work mining was begun in the coal basin of Kushmurun (64°30' east longitude, 52°30' north latitude) of the Kustanay region. The brown coal of this deposit also has a high ash content. New electric power plants which are supplied with this coal are built at the Ural. At the same time electric power plants with 1,2 to 2,4 million kW are projected in the Kustanay region. It had to be determined what can more advantageously be conveyed from Kushmurun to the Ural: coal or electric power. The transfer of electric energy from Siberia to the Ural and farther to the west of the country must not only be brought into accordance with the hydroelectric power plants but also with the working of the large coal deposits in the Asiatic part of the country and with the construction of large thermal power plants. A principal scheme for the connection between Ural and Siberia is given here. According to this scheme two large longitudinal connections in the direction of Omsk-Tyumen'-Sverdlovsk and Omsk-Petropavlovsk-Chelyabinsk should be established. Along the main railroad lines a 110 kV distribution network consisting of two-circuit lines of intermediate and cen-

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tral substations with 110 kV is to be set up. For increasing the transmitting power of the 110 kV lines the possibility of changing them to a 154 kV voltage (where necessary) is to be investigated. - At present distributing networks with 110 kV are built in the section of Novosibirsk-Omsk-Kurgan-Chelyabinsk. The disregard of the development of 6 kV, 35 kV and 110 kV networks led to the fact that a large number of small uneconomic plants exist beside large electric power plants and that a considerable number of inhabited places is without power supply. These consume much fuel and need much personnel. An immediate solution of the problem concerning the construction of the hydroelectric power plant at the lower Ob' and the strengthening of the hydroelectric power plants at the Kama is demanded. The works by the Gidroyekt show that it would be possible to establish a hydroelectric power plant with several million kW at the lower Ob' in the Region of Salekhard (town at the polar circle, on the Ob'). For the next 10 years the Kama and its water basin will represent the main source of the power system of the Ural. The work of the hydroelectric power plants Votkinskaya and Mzhne Kamskaya have recently been check-

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ed. 2) The first and most important task consists in the connection of the small and average power systems with the large ones and in the establishment of the 110 and 35 kV networks for supplying all places and industries by the large power systems. The opinion that the problems on the construction of inter-system lines with 400 kV can be dealt with independently of the problems of the development of 110-220 kV networks is wrong. The only reasonable basis for projecting a uniform high-voltage network is a joint plan for the development of the power systems, the 110 - 220 kV networks and the 400 - 500 kV networks. There is 1 figure.

1. Industry--USSR 2. Water power--USSR 3. Electric power production--USSR

Card 4/4

GUSTOV, L.D., inzh. (Sverdlovsk); LEVIN, M.I., inzh. (Sverdlovsk);  
MARINOV, A.M., inzh. (Sverdlovsk); MYZIN, L.M., inzh. (Sverdlovsk);  
PETROKOV, A.P., inzh. (Sverdlovsk)

Sverdlovsk's 500 kv. substation. Elektrichestvo no.7:61-65  
Jl '60. (MIRA 13:8)  
(Sverdlovsk—Electric substations)

MOSYAGINA, Ye.N.; MYZINA, N.V.

Pathogenesis of anemia in leukemia in children. *Pediatrics*  
41 no.10:23-29 O '62. (MIRA 17:2)

1. Iz Instituta pediatrii (dir. - dotsent M.Ya. Studenikin)  
AMN SSSR.

MYZIT, A.

Obligations of Latvian workers. Mias. ind. SSSR 28 no.6:8-9 '57.

(MIRA 11:1)

1. Sovnarkhoz Latviyskoy SSR.

(Latvia--Meat industry)

L 25427-66 EPF(n)-2/EMI(m)/ETC(f)/EWG(m) WW

ACC NR: AP6010489

SOURCE CODE: UR/0201/65/000/003/0005/0010

AUTHORS: Dideykin, T. S.; Myznikov, I. V.

32  
B

ORG: none

TITLE: Frequency characteristics of a subcritical reactor

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 3, 1965, 5-10

TOPIC TAGS: subcritical reactor, frequency characteristic, prompt neutron, nuclear reactor characteristic

ABSTRACT: The authors present equations and plots for the phase-frequency, and amplitude-frequency characteristics of a subcritical reactor with different degrees of initial subcriticalities. The plots are obtained on the basis of the equations using a fission prompt-neutron lifetime of  $5 \times 10^{-5}$  sec. The results show that at high frequencies ( $\omega \geq l^{-1}$ , where  $l = 5 \times 10^{-5}$  sec) the depth of subcriticality greatly influences the variation of the reactivity

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ACC NR: AP6010489

oscillations with the phase, although the phase-frequency characteristic is also influenced by the subcriticality at lower frequencies. At lower frequencies, an increase in the depth of subcriticality is equivalent to either a decrease in the effective fraction of the delayed neutrons, or to an increase of the decay constant. The dependence of the frequency on the criticality can be used both to monitor the approach of the reactor to the critical state, and for experimental determination of the degree of subcriticality. In the case of the amplitude-frequency characteristics, the effect of the depth of subcriticality is strongest at low frequencies, and this can serve as a practical method of determining the depth of subcriticality for a known amplitude of introduced reactivity, or else to determine the efficiency of the regulator for a specified depth of subcriticality. Orig. art. has: 2 figures and 10 formulas.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 002

Card

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